

**IN THE CLAIMS:**

Please amend the claims as follows.

1-30. (Canceled)

31. (New) A system comprising:

one or more processors; and

memory storing program instructions;

wherein the program instructions are executable by the one or more processors to:

store a replica of a data object;

store history information indicative of previous accesses to the replica of the data object; and

in response to receiving a write request to update the replica of the data object, select one or more operations to perform on the replica of the data object based on the history information, wherein the one or more operations selected based on the history information include one or more of:

updating the replica of the data object; and

marking the replica of the data object as stale.

32. (New) The system of claim 31, wherein selecting the one or more operations based on the history information comprises:

analyzing the history information to determine a number of accesses to the replica of the data object received within a first time period; and

selecting to update the replica of the data object in response to determining that the number of accesses received within the first time period is greater than or equal to a threshold value.

33. (New) The system of claim 31, wherein selecting the one or more operations based on the history information comprises:

analyzing the history information to determine a number of accesses to the replica of the data object received within a first time period; and

selecting to mark the replica of the data object as stale in response to determining that the number of accesses received within the first time period is less than a threshold value.

34. (New) The system of claim 31,  
wherein the replica of the data object includes a plurality of portions of data;  
wherein the write request to update the replica of the data object comprises a write request to update a first portion of the plurality of portions of data;  
wherein said updating the replica of the data object comprises updating the first portion of the plurality of portions of data;  
wherein said marking the replica of the data object as stale comprises marking the first portion of the plurality of portions of data as stale.

35. (New) The system of claim 34, wherein selecting the one or more operations based on the history information comprises:

analyzing the history information to determine a number of accesses to the first portion of the plurality of portions of data received within a first time period;

selecting to update the first portion of the plurality of portions of data if the number of accesses received within the first time period is greater than or equal to a threshold value;

selecting to mark the first portion of the plurality of portions of data as stale if the number of accesses received within the first time period is less than the threshold value.

36. (New) The system of claim 31,  
wherein the replica of the data object comprises a replica of a file.

37. (New) A computer-readable storage medium storing program instructions executable to:

store a replica of a data object;

store history information indicative of previous accesses to the replica of the data object;

and

in response to receiving a write request to update the replica of the data object, select one or more operations to perform on the replica of the data object based on the history information, wherein the one or more operations selected based on the history information include one or more of:

- updating the replica of the data object; and
- marking the replica of the data object as stale.

38. (New) The computer-readable storage medium of claim 37, wherein selecting the one or more operations based on the history information comprises:

- analyzing the history information to determine a number of accesses to the replica of the data object received within a first time period; and

- selecting to update the replica of the data object in response to determining that the number of accesses received within the first time period is greater than or equal to a threshold value.

39. (New) The computer-readable storage medium of claim 37, wherein selecting the one or more operations based on the history information comprises:

- analyzing the history information to determine a number of accesses to the replica of the data object received within a first time period; and

- selecting to mark the replica of the data object as stale in response to determining that the number of accesses received within the first time period is less than a threshold value.

40. (New) The computer-readable storage medium of claim 37,

- wherein the replica of the data object includes a plurality of portions of data;

- wherein the write request to update the replica of the data object comprises a write request to update a first portion of the plurality of portions of data;

- wherein said updating the replica of the data object comprises updating the first portion of the plurality of portions of data;

- wherein said marking the replica of the data object as stale comprises marking the first portion of the plurality of portions of data as stale.

41. (New) The computer-readable storage medium of claim 40, wherein selecting the one or more operations based on the history information comprises:

- analyzing the history information to determine a number of accesses to the first portion of the plurality of portions of data received within a first time period;

- selecting to update the first portion of the plurality of portions of data if the number of accesses received within the first time period is greater than or equal to a threshold value;

- selecting to mark the first portion of the plurality of portions of data as stale if the number of accesses received within the first time period is less than the threshold value.

42. (New) The computer-readable storage medium of claim 37, wherein the replica of the data object comprises a replica of a file.

43. (New) A method comprising:

- storing a replica of a data object;

- storing history information indicative of previous accesses to the replica of the data object; and

- in response to receiving a write request to update the replica of the data object, selecting one or more operations to perform on the replica of the data object based on the history information, wherein the one or more operations selected based on the history information include one or more of:

  - updating the replica of the data object; and

  - marking the replica of the data object as stale.

44. (New) The method of claim 43, wherein selecting the one or more operations based on the history information comprises:

- analyzing the history information to determine a number of accesses to the replica of the data object received within a first time period; and

- selecting to update the replica of the data object in response to determining that the number of accesses received within the first time period is greater than or equal to a threshold value.

45. (New) The method of claim 43, wherein selecting the one or more operations based on the history information comprises:

analyzing the history information to determine a number of accesses to the replica of the data object received within a first time period; and

selecting to mark the replica of the data object as stale in response to determining that the number of accesses received within the first time period is less than a threshold value.

46. (New) The method of claim 43,

wherein the replica of the data object includes a plurality of portions of data;

wherein the write request to update the replica of the data object comprises a write request to update a first portion of the plurality of portions of data;

wherein said updating the replica of the data object comprises updating the first portion of the plurality of portions of data;

wherein said marking the replica of the data object as stale comprises marking the first portion of the plurality of portions of data as stale.

47. (New) The method of claim 46, wherein selecting the one or more operations based on the history information comprises:

analyzing the history information to determine a number of accesses to the first portion of the plurality of portions of data received within a first time period;

selecting to update the first portion of the plurality of portions of data if the number of accesses received within the first time period is greater than or equal to a threshold value;

selecting to mark the first portion of the plurality of portions of data as stale if the number of accesses received within the first time period is less than the threshold value.

48. (New) The method of claim 43,

wherein the replica of the data object comprises a replica of a file.